

Iowa School Occupational Exposure to Bloodborne Pathogens and Needlestick Prevention

The purpose of the United States Department of Labor, Occupational Safety and Health Act (OSHA), Occupational Exposure to Bloodborne Pathogens Regulations and Standards, adopted by the Iowa Division of Labor, Occupational Safety and Health Bureau, is to end and reduce employee exposure to blood and other potentially infectious materials (OPIM). The laws require Iowa schools and education agencies, as employers, to develop an occupational exposure to bloodborne pathogens program. The program includes written policy and plan guidelines for employees. The school works with local health agencies, health providers, non-managerial school staff, and school personnel in developing the program and educating personnel, families, students, and the community to prevent potential exposures (United States Code 29 U.S.C. 661 *et seq.* Occupational Safety and Health Act and U.S. Code of Federal Regulations 29 CFR 1910.1030)

The applicable standards to schools include: Scope and Application, Definitions, Exposure Control, Methods of Compliance, Hepatitis B Vaccination, Post-exposure Evaluation and Follow-up, Communication of Hazards to Employees, and Recordkeeping.

http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=10051

A school board policy sample recommended by the Iowa Association of School Boards is to include bloodborne pathogens in the employee physical examination policy:

“It shall be the responsibility of the superintendent to write an exposure control plan to eliminate or minimize district occupational exposure to bloodborne pathogens. The plan for designated employees shall include, but not be limited to, scope and application, definitions, exposure control, methods of compliance, hepatitis B vaccination, post-exposure evaluation and follow-up, hazards communication to employees, and recordkeeping.”

An advisory group may develop the plan. Examples of existing groups to consider are the school improvement advisory committee or the health advisory committee and advisory individuals to consider include representation from the school board, school administration, non-administrative staff, school nurse, physicians, public health, human services, mental health, support and related services, transportation, maintenance, food service, athletics, physical education, health education, school health, parents, students, community, and business.

An OSHA Model Exposure Control Plan includes: Introduction; Policy; Program Administration; Employee Exposure Determination; Methods of Implementation and Control; Hepatitis B Vaccination; Post-Exposure Evaluation and Follow-up; Administration of Post-Exposure Evaluation; Procedures for Evaluating Circumstances Surrounding an Exposure Incident; Employee Training; and Recordkeeping. The model plan is available on the OSHA website in Appendix D:

http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=DIRECTIVES&p_id=2570#APPD

Key school plan considerations include and are not limited to the response team, training-education, post exposure, and protective equipment.

Response Team: Establish a school employee team and backup team assigned to respond to situations involving blood and OPIM. The district selects team members through a review of job requirements, past potential exposures, and employees reasonably expected to have exposure to blood and OPIM as described in their job descriptions. The list of tasks and procedures involving possible contact with blood or OPIM may include response to injury, response to illness, and health care procedures. Team members to consider include: nurses, coaches, physical education teachers, and paraprofessionals assisting students who require help with personal and health care procedures.

Education: Employees included in the program, all individuals in the school setting, students, families, and the community need annual education in general infection control measures to prevent

potential exposure (also called universal precautions, standard precautions, and body substance isolation) and understand the school exposure control response program. The Iowa Department of Public Health provides general infection control measures, under reportable disease information at http://www.idph.state.ia.us/idph_universalhelp/main.aspx?system=IdphEpiManual

Post-Exposure: All employees that have an unanticipated potential exposure follow the post-exposure procedure. A recommended consideration is a pre-arranged partnership with a community infection control resource to provide the confidential post-exposure evaluation, follow-up, health care coordination, and record keeping. The laws apply to employees. Potential exposure of a student may be assessed on an individual basis guided by the employee requirements.

Personal protective equipment (PPE): Schools determine the appropriate and provide the needed personal protective equipment such as, but not limited to gloves and barriers not permitting blood or other potentially infectious materials to pass through or reach the employee's skin or mucous membranes. The school ensures that the employees use appropriate personal protective equipment and equipment is readily accessible to the employee. For example schools consider providing playground supervisors with needed PPE to carry with them to prevent an exposure

Resources

Iowa Department of Public Health, Epi Manual, Reportable Disease Information, General Infection Control Measures, http://www.idph.state.ia.us/idph_universalhelp/main.aspx?system=IdphEpiManual

Iowa Division of Labor, IOSHA Consultation & Education, Pamela Rosa, Senior Industrial Hygienist, 1000 E Grand, Des Moines, 515-281-6430 rosa.pamela@dol.gov

U.S. Department of Labor, Occupational Safety Health Administration, Bloodborne Pathogens. <http://www.osha.gov/SLTC/bloodbornepathogens/index.html>

Appendix D, Model Exposure Control Plan. A model exposure control plan that meets the OSHA Bloodborne Pathogens Standard requirements and to tailor to meet the specific site needs.

http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=10051

Frequently Asked Questions: Bloodborne Pathogens

<http://www.osha.gov/html/faq-bbp.html>

Most Frequently Asked Questions Concerning the Bloodborne Pathogens Standard

http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=INTERPRETATIONS&p_id=21010

OSHA Bloodborne Pathogens and Needlestick Prevention Introduction/Index:

<http://www.osha.gov/SLTC/bloodbornepathogens/index.html>

March 2011

Q & A:

Q1. Who is covered by the standard?

A1. The standard applies to **all** employees who have occupational exposure to blood or other potentially infectious materials (OPIM).

- Occupational exposure is defined as "reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or OPIM that may result from the performance of the employee's duties."
- Blood is defined as human blood, human blood components, and products made from human blood.

OPIM is defined as the following human body fluids: saliva in dental procedures, semen, vaginal secretions, cerebrospinal, synovial, pleural, pericardial, peritoneal, and amniotic fluids; body fluids visibly contaminated with blood; along with all body fluids in situations where it is difficult or impossible to differentiate between body fluids; unfixed human tissues or organs (other than intact skin); HIV-containing cell or tissue cultures, organ cultures, and HIV- or HBV-containing culture media or other solutions; and blood, organs, or other tissues from experimental animals infected with HIV or HBV.

Q6. Are employees who are designated to render first aid covered by the standard? A6. Yes. If employees are trained and designated as responsible for rendering first aid or medical assistance as part of their job duties, they are covered by the protections of the standard. However, OSHA will consider it a **de minimis** violation - a technical violation carrying no penalties - if employees, who administer first aid as a collateral duty to their routine work

assignments, are not offered the pre-exposure hepatitis B vaccination, provided that a number of conditions are met. In these circumstances, no citations will be issued.

The **de minimis** classification for failure to offer hepatitis B vaccination in advance of exposure does **not** apply to personnel who provide first aid at a first aid station, clinic, or dispensary, or to the health care, emergency response or public safety personnel expected to render first aid in the course of their work. Exceptions are limited to persons who render first aid only as a collateral duty, responding solely to injuries resulting from workplace incidents, generally at the location where the incident occurred. To merit the **de minimis** classification, the following conditions also must be met:

- Reporting procedures must be in place under the exposure control plan to ensure all first aid incidents involving exposure are reported to the employer **before the end of the work shift** during which the incident occurs.
- Reports of first aid incidents must include the names of all first aid providers and a description of the circumstances of the accident, including date and time, as well as a determination of whether an exposure incident, as defined in the standard, has occurred.
- Exposure reports must be included on a list of such first aid incidents that is readily available to all employees and provided to OSHA upon request.
- First aid providers must receive training under the Bloodborne Pathogens Standard that covers the specifics of the reporting procedures.

All first aid providers who render assistance in any situation involving the presence of blood or other potentially infectious materials, regardless of whether or not a specific exposure ~~incident~~ occurs, must have the vaccine made available to them as soon as possible but in no event later than **24 hours after the exposure incident**. If an exposure incident as defined in the standard has taken place, other post-exposure follow-up procedures must be initiated immediately, per the requirements of the standard. [OSHA: This document was edited on 2/7/03 to strike information that no longer reflects current OSHA policy.]

http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=INTERPRETATIONS&p_id=21010

1992 - 07/21/1992 - Child care workers under scope of occupational exposure to bloodborne pathogens.

http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=INTERPRETATIONS&p_id=20760

Child care workers designated as responsible for rendering first aid or medical assistance as part of their job duties are covered by this standard. However, failure to offer the hepatitis B vaccine pre-exposure to persons who render first aid only as a collateral duty will be considered a technical violation carrying no penalties, provided a number of conditions are met.

Q36. What does OSHA mean by the term "regulated waste"? A36. The Bloodborne Pathogens Standard uses the term, "regulated waste," to refer to the following categories of waste which require special handling at a minimum; (1) liquid or semi-liquid blood or OPIM; (2) items contaminated with blood or OPIM and which would release these substances in a liquid or semi-liquid state if compressed; (3) items that are caked with dried blood or OPIM and are capable of releasing these materials during handling; (4) contaminated sharps; and (5) pathological and microbiological wastes containing blood or OPIM.

Q37. Are feminine hygiene products considered regulated waste? A37. OSHA does not generally consider discarded feminine hygiene products, used to absorb menstrual flow, to fall within the definition of regulated waste. The intended function of products such as sanitary napkins is to absorb and contain blood. The absorbent material of which they are composed would, under most circumstances, prevent the release of liquid or semi-liquid blood or the flaking off of dried blood. OSHA expects these products to be discarded into waste containers which are properly lined with plastic or wax paper bags. Such bags should protect the employees from physical contact with the contents. At the same time, it is the employer's responsibility to determine the existence of regulated waste. This determination is not based on actual volume of blood, but rather on the potential to release blood, (e.g., when compacted in the waste container). If OSHA determines, on a case-by-case basis, that sufficient evidence of regulated waste exists, either through observation, (e.g., a pool of liquid in the bottom of a container, dried blood flaking off during handling), or based on employee interviews, citations may be issued.

Would saliva in an eye be an exposure? 3/4/11 Saliva is not on the list of other potentially infectious materials. However, if the saliva is contaminated with blood (i.e. the child is bleeding from the mouth due to injury) then it would be an exposure. However, employees are supposed to be wearing protective equipment, such as a face shield when there is a chance for splattering of blood. Refer to the definition of OPIM and also a letter of interpretation regarding saliva below. The BBP Standard refers to bloodborne pathogens only. It does not mean infectious diseases such as the flu will not infect the nurse in this situation. If the nurse was spit in the eye by someone with the flu and then came down with the flu it could possibly be a recordable illness for the school. Recordkeeping is the only standard that would apply in this situation.

Other Potentially Infectious Materials means (1) The following human body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, any body fluid that is visibly contaminated with blood, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids; (2) Any unfixed tissue or organ (other than intact skin) from a human (living or dead); and (3) HIV-containing cell or tissue cultures, organ cultures, and HIV- or HBV-containing culture medium or other solutions; and blood, organs, or other tissues from experimental animals infected with HIV or HBV.

http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=INTERPRETATIONS&p_id=22079

Education, Information, and Training: The employer trains each employee at no cost to the employee and during working hours; on employment, at least annually, and when changes occur. The training content corresponds to the employee literacy level and language. The person conducting the training must be knowledgeable in the subject matter covered in the training program related to the workplace that the training will address. The program includes: accessibility to a copy of the standard regulatory text and an explanation of its contents; a general explanation of the epidemiology, symptoms, modes of transmission of bloodborne diseases; an explanation of the employer's exposure control plan and the how the employee can access a copy of the written plan; an explanation of appropriate methods for recognizing tasks and other activities that may involve exposure to blood and other potentially infectious materials; an explanation of the use/limitations of methods to prevent or reduce exposure including appropriate engineering controls, work practices, and personal protective equipment; information on the types, proper use, location, removal, handling, decontamination, and disposal of personal protective equipment; an explanation of the basis for selection of personal protective equipment; information on the hepatitis B vaccine, including information on its efficacy, safety, method of administration, the benefits of being vaccinated, and the vaccination; information on the appropriate actions to take and persons to contact in an emergency involving blood or other potentially infectious materials; an explanation of the procedure to follow if an exposure incident occurs, including reporting the incident and the medical follow-up available; information on the post-exposure evaluation and follow-up that the employer is required to provide for the employee following an exposure incident; an explanation of the signs and labels and/or color coding; and an opportunity for interactive questions and answers with the person conducting the training session. The person conducting the training shall be knowledgeable in the subject matter covered by the elements contained in the training program as it relates to the workplace that the training will address. 29 CFR 1910.1030(g)(2)

Is the AEA training OK? To prevent potential exposures, it is recommended all employees receive yearly education to avoid potential exposures. The standard education requirements need to be covered by the training. To meet the standard requirements the training includes an interactive component. The Department of Human Services approves BBP training for employees under a DHS license. Some preschool programs are licensed by DHS-and employees are required to take the approved DHS training (the BBP online AEA professional development is not an approved DHS training). 29 CFR 1910.1030(g)

Q7. Are employees such as housekeepers, maintenance workers, or janitors covered by the standard?

A7. Housekeeping workers in health care facilities may have occupational exposure to bloodborne pathogens, as defined by the standard. Individuals who perform housekeeping duties, particularly in patient care and laboratory areas, may perform tasks, such as cleaning blood spills and handling regulated wastes, which constitute occupational exposure. While OSHA does not generally consider maintenance personnel and janitorial staff employed in non-health care facilities to have occupational exposure, it is the employer's responsibility to determine which job classifications or specific tasks and procedures involve occupational exposure. For example, OSHA expects products such as discarded sanitary napkins to be discarded into waste containers which are lined in such a way as to prevent contact with the contents. But at the same time, the employer must determine if employees can come into contact with blood during the normal handling of such products from initial pick-up through disposal in the outgoing trash. If OSHA determines, on a case-by-case basis, that sufficient evidence of reasonably anticipated exposure exists, the employer will be held responsible for providing the protections of 29 CFR 1910.1030 to employees with occupational exposure.

What does OSHA currently accept as "appropriate" disinfectants to prevent the spread of HIV and HBV?

A review of the initial intent of the Bloodborne Pathogens Standard that specifically deals with the cleaning of contaminated work surfaces, i.e., 1910.1030(d)(4)(ii)(A), reveals that OSHA intended to provide a performance-based provision that would allow for future development of "appropriate disinfectant" products. OSHA has reviewed the information on the disinfectants and has reconsidered its position on EPA-registered disinfectants that are labeled as effective against HBV and HIV. OSHA's current stance is that EPA-registered disinfectants for HIV and HBV meet the requirement in the standard and are "appropriate" disinfectants to clean contaminated surfaces, provided such surfaces have not become contaminated with agent(s) or volumes of or concentrations of agent(s) for which higher level disinfection is recommended.

It is important to emphasize the EPA-approved label section titled "SPECIAL INSTRUCTIONS FOR CLEANING AND DECONTAMINATION AGAINST HIV-1 AND HBV on SURFACES\OBJECTS SOILED WITH BLOOD\BODY FLUIDS." On the labels that OSHA has seen, these instructions require:

1. personal protection devices for the worker performing the task;
 2. all the blood must be cleaned thoroughly before applying the disinfectant;
 3. the disposal of the infectious waste is in accordance with federal, state, or local regulations; and
 4. the surface is left wet with the disinfectant for 30 seconds for HIV-1 and 10 minutes for HBV."
- <http://www.osha.gov/html/faq-bbp.html#faq2>